

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/551,877  
Source: pc5/10  
Date Processed by STIC: 10/14/05

# ***ENTERED***



PCT

## RAW SEQUENCE LISTING

DATE: 10/14/2005

PATENT APPLICATION: US/10/551,877

TIME: 13:43:31

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\10142005\J551877.raw

```

3 <110> APPLICANT: Rodriguez Aguirre, Jose Francisco
4      Gonzalez De Llano, Ma Dolores
5      Oa Blanco, Ana Maria
6      Abaitua Elustondo, Fernando
7      Maraver Molina, Antonio
8      Clemente Cervera, Roberto
9      Ruiz Caston, Jose
10     Rodriguez Fernandez-Alba, Juan Ramon
12 <120> TITLE OF INVENTION: WHOLE EMPTY VIRAL PARTICLES OF THE INFECTIOUS BURSAL DISEASE
13     VIRUS (IBDV), PRODUCTION PROCESS AND APPLICATIONS
15 <130> FILE REFERENCE: 4258-114
C--> 17 <140> CURRENT APPLICATION NUMBER: US/10/551,877
18 <141> CURRENT FILING DATE: 2005-09-30
20 <150> PRIOR APPLICATION NUMBER: P200300751
21 <151> PRIOR FILING DATE: 2003-03-31
23 <150> PRIOR APPLICATION NUMBER: PCT/ES2004/000147
24 <151> PRIOR FILING DATE: 2004-03-31
26 <160> NUMBER OF SEQ ID NOS: 9
28 <170> SOFTWARE: PatentIn version 3.3
30 <210> SEQ ID NO: 1
31 <211> LENGTH: 10909
32 <212> TYPE: DNA
33 <213> ORGANISM: Artificial Sequence
35 <220> FEATURE:
36 <223> OTHER INFORMATION: Synthetic Construct
39 <220> FEATURE:
40 <221> NAME/KEY: gene
41 <222> LOCATION: (3)..(3041)
42 <223> OTHER INFORMATION: Open reading frame of IBDV polyprotein in reverse
complementary
43     strand
45 <220> FEATURE:
46 <221> NAME/KEY: promoter
47 <222> LOCATION: (3083)..(3211)
48 <223> OTHER INFORMATION: AcMNV polyhedrin promoter
50 <220> FEATURE:
51 <221> NAME/KEY: promoter
52 <222> LOCATION: (3230)..(3351)
53 <223> OTHER INFORMATION: AcMNV p10 promoter
55 <220> FEATURE:
56 <221> NAME/KEY: CDS
57 <222> LOCATION: (3388)..(6027)
58 <223> OTHER INFORMATION: Open reading frame of IBDV VP1 protein
60 <220> FEATURE:

```

## RAW SEQUENCE LISTING

DATE: 10/14/2005

PATENT APPLICATION: US/10/551,877

TIME: 13:43:31

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\10142005\J551877.raw

```

61 <221> NAME/KEY: polyA_site
62 <222> LOCATION: (6068)..(6331)
64 <220> FEATURE:
65 <221> NAME/KEY: gene
66 <222> LOCATION: (6901)..(7434)
67 <223> OTHER INFORMATION: Gentamicin resistance gene
69 <220> FEATURE:
70 <221> NAME/KEY: misc_feature
71 <222> LOCATION: (7501)..(7725)
72 <223> OTHER INFORMATION: Minitransposon Tn7R
74 <220> FEATURE:
75 <221> NAME/KEY: gene
76 <222> LOCATION: (8787)..(9647)
77 <223> OTHER INFORMATION: Ampicillin resistance gene
79 <220> FEATURE:
80 <221> NAME/KEY: misc_feature
81 <222> LOCATION: (9854)..(10234)
82 <223> OTHER INFORMATION: F1
84 <220> FEATURE:
85 <221> NAME/KEY: misc_feature
86 <222> LOCATION: (10418)..(10583)
87 <223> OTHER INFORMATION: Minitransposon Tn7L
89 <400> SEQUENCE: 1
90 gctcactcaa ggtcctcatc agagacggtc ctgatccagc ggcccagccg accaggggggt      60
92 ctctgtgttg gagcattggg ttttggttg ggctttggta gagcccgccct gggattgcga      120
94 tgcttcatct ccacgcagc caagagcaga tctttcatct gttcttgggt tgggccacgt      180
96 ccatggttga tttcatagac tttggcaact tcgtctatga aagcttgggg tggctctgcc      240
98 tgtcctggag ccccgtagat cgacgtagct gcccttagga tttgttcttc tgatgccaac      300
100 cggctcttct ctgcatgcac gtagtctaga tagtcctcgt ttgggtccgg tatttctcgt      360
102 ttgttctgcc agtactttac ctggcctggg ctgggccctc ggtgcccatt gagtgtacc      420
104 cattctggtg ttgcaaagta gatgcccatt gtctccatct tctttgagat ccgtgtgtct      480
106 ttttccctct gtgcttctc tgggtgtggg ccccgagcct ccactccgta gcctgtgtc      540
108 ccgtacttgg ccctttgcga ctgctgcct gcttgtgggt cgtttgcaag aaaatttcgc      600
110 atccgatggg cggtcgggtc gctgagtgcg aagttggcca tgtcagtcac aatcccatc      660
112 tcttccagcc acatgaacac actgagtgcg gattggaata gtgggtccac gttggctgct      720
114 gcttccattg ctctgacggc actctcgagt tcgggggtct ctttgaactc tgatgcagcc      780
116 atggcaaggt ggtactggcg tcctgcattg ggtggaaggt atggtaggtt gaggtagggg      840
118 agcctgtccc agtcgcgtgg attgtgaggg aaacgtttga tgaacgttgc ccagttgggc      900
120 ccggtgttta catcgaatgc tccgggacca gccaacctaa ggccaagtgc gtgtgcagta      960
122 gcgagcttgg tgcttctaaa gcttactttc tcaatctcgc cacaagcatt gagggctccc      1020
124 gtcatagcca catggattgg gactttgggt cgaaacacat ccagtgaagc tatggctaga      1080
126 tttccactgt ttcccacaat aggaggtatg ggatctttgg acagcataat gctgtcgtcc      1140
128 cagacatcat ctattgggac aacgggtgtag tctctcccag tctccagtgg aagtacccca      1200
130 tctggagcat atccatagac tctgtgtcca gagagagttc gtatgaagga tcctctttga      1260
132 gatggaggtt ggaggtcttc tcgcacgcct tcaatgacag caaacatttt gctgttcaat      1320
134 gctttgggtg tcatggcgtc ttccactgtc gtaataacca cagggaatag cgtggcacc      1380
136 tctcttaaca cgcagtcgag gttgtgtgca ccgcggagta cccaggtga agcaagaatc      1440
138 ccgtcgacta cgggattctg gggcacctgg aatagattcg cgactacctc gtacccttg      1500
140 tcggcggcga gagtcagctg ccttatgcgg cctgaggcag ctcttgctt tccatgacgc      1560

```

## RAW SEQUENCE LISTING

DATE: 10/14/2005

PATENT APPLICATION: US/10/551,877

TIME: 13:43:31

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\10142005\J551877.raw

```

142 gctcgagcag ttctgaagc ggcctgggcc tcatcgccca gcaggtagtc tacaccttcc 1620
144 ccaattgcat gggctagggg agcggcagggt gggaacaatg tggagaccac cggcacagct 1680
146 atcctcctta tggcccggat tatgtctttg aagccgaatg ctcttgcaat cttcagggga 1740
148 gagttgaggt cggccacctc catgaagtat tcacgaaagt cagtgtactc cttgtttggc 1800
150 cagacggtct tgatgccaaag acggtccctc tcaactagta tcaattttgt gtagttcatg 1860
152 gctcctgggt caaatcggcc gtattctgta accaggttct ttgctagtgc aggatttggg 1920
154 atcagctcga agttgctcac ccagcgacc gtaacgacgg atcctgttgc cactctttcg 1980
156 taggccacta gcgtgacggg acggaggggc cctggatagt tgccaccatg gatcgctact 2040
158 gctaggctcc ctcttgccga ccatgacatc tgatcccctg cctgaccacc acttttggag 2100
160 gtcactatct ccagtttgat ggatgtgatt ggctgggtta tctcgtttgt tggaaacaca 2160
162 agattgaatg gcataagggt gtcgggtgccg gtcgtcagcc cattgtttgc ggccacagcc 2220
164 ctggtgatta ccgttgtccc atcaaagcct atgaggtaga tgggtggcgcc cagtacaagg 2280
166 ccgtggacgc ttgttcgaaa cacgagctct cccccaacgc tgaggcttgc gatggcatca 2340
168 atgttggtc agaacagtgt gattgttacc ccacctgggt ggtactgtga tgagaattgg 2400
170 taatcatcgg ctgcagttat ggtgtagact ctgggcctgt cactgctgtc acatgtggct 2460
172 accatttttg ggtcaagccc tattgcggga atggggtcac caagcctcac ataccaaga 2520
174 tcatatgatg tgggtaagct gaggacgggt accccttccc ctactaggac gttcccaatt 2580
176 ttgtcgttga tgttggtgtg tgcagacatc aaccattgt agctaacatc tgtcagttca 2640
178 ctcaggcttc cttggaagggt cacggcggtt atggtgcccgt ttagtgcata aacgccacca 2700
180 ggaagtgtgc ttgacctcac tgtgagactc cgactcacta gcctgcagta gttgtaactg 2760
182 gccggtaggt tctgggcagt caggagcatc tgatcgaact tgtagttccc attgccctgc 2820
184 agtgtgtagt gagcaccac aattgagcca gggaatccag ggaaaaagac aattagccct 2880
186 gacctgtgt ccccccacagt caaattgtag gtcgaggtct ctgacctgag agtgtgtctc 2940
188 tccagggtgt cgtccggaat ggacgccggg ccggttgttg gcatcagaag gctccgtatg 3000
190 aacggaacaa tctgctgggt ttgatctgac aggtttgtca tcgatgcgat cgaattccgc 3060
192 gcgcttcgga ccgggatccg cgcccgatgg tgggacggta tgaataatcc ggaatattta 3120
194 taggtttttt tattacaaaa ctgttacgaa aacagtaaaa tacttattta tttgcgagat 3180
196 ggttatcatt ttaattatct ccatgatcta ttaatatcc ggagtatacg gacctttaat 3240
198 tcaaccaaac acaatatatt atagttaa atagaattatt atcaaatcat ttgtatatta 3300
200 attaaaatac tatactgtaa attacatatt atttacaatc actcgacgaa gacttgatca 3360
202 cccgggatct cgaggctcag ggtatcag atg agt gac gtt ttc aat agt cca cag 3414
203 Met Ser Asp Val Phe Asn Ser Pro Gln
204 1 5
206 gcg cga agc acg atc tca gca gcg ttc ggc ata aag cct act gct gga 3462
207 Ala Arg Ser Thr Ile Ser Ala Ala Phe Gly Ile Lys Pro Thr Ala Gly
208 10 15 20 25
210 caa gac gtg gaa gaa ctc ttg atc cct aaa gtt tgg gtg cca cct gag 3510
211 Gln Asp Val Glu Glu Leu Leu Ile Pro Lys Val Trp Val Pro Pro Glu
212 30 35 40
214 gat ccg ctt gcc agc cct agt cga ctg gca aag ttc ctc aga gag aac 3558
215 Asp Pro Leu Ala Ser Pro Ser Arg Leu Ala Lys Phe Leu Arg Glu Asn
216 45 50 55
218 ggc tac aaa gtt ttg cag ccg cgg tct ctg ccc gag aat gag gag tat 3606
219 Gly Tyr Lys Val Leu Gln Pro Arg Ser Leu Pro Glu Asn Glu Glu Tyr
220 60 65 70
222 gag acc gac caa ata ctc cca gac tta gca tgg atg cga cag ata gaa 3654
223 Glu Thr Asp Gln Ile Leu Pro Asp Leu Ala Trp Met Arg Gln Ile Glu
224 75 80 85
226 ggg gct gtt tta aaa ccc act cta tct ctc cct att gga gat cag gag 3702

```

## RAW SEQUENCE LISTING

DATE: 10/14/2005

PATENT APPLICATION: US/10/551,877

TIME: 13:43:31

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\10142005\J551877.raw

227	Gly	Ala	Val	Leu	Lys	Pro	Thr	Leu	Ser	Leu	Pro	Ile	Gly	Asp	Gln	Glu	
228	90					95					100					105	
230	tac	ttc	cca	aag	tac	tac	cca	aca	cat	cgc	cct	agc	aag	gag	aag	ccc	3750
231	Tyr	Phe	Pro	Lys	Tyr	Tyr	Pro	Thr	His	Arg	Pro	Ser	Lys	Glu	Lys	Pro	
232				110						115					120		
234	aat	gcg	tac	cca	cca	gac	atc	gca	cta	ctc	aag	cag	atg	att	tac	ctg	3798
235	Asn	Ala	Tyr	Pro	Pro	Asp	Ile	Ala	Leu	Leu	Lys	Gln	Met	Ile	Tyr	Leu	
236				125						130					135		
238	ttt	ctc	cag	gtt	cca	gag	gcc	aac	gag	ggc	cta	aag	gat	gaa	gta	acc	3846
239	Phe	Leu	Gln	Val	Pro	Glu	Ala	Asn	Glu	Gly	Leu	Lys	Asp	Glu	Val	Thr	
240				140						145					150		
242	ctc	ttg	acc	caa	aac	ata	agg	gac	aag	gcc	tat	gga	agt	ggg	acc	tac	3894
243	Leu	Leu	Thr	Gln	Asn	Ile	Arg	Asp	Lys	Ala	Tyr	Gly	Ser	Gly	Thr	Tyr	
244				155						160					165		
246	atg	gga	caa	gca	aat	cga	ctt	gtg	gcc	atg	aag	gag	gtc	gcc	act	gga	3942
247	Met	Gly	Gln	Ala	Asn	Arg	Leu	Val	Ala	Met	Lys	Glu	Val	Ala	Thr	Gly	
248	170					175					180					185	
250	aga	aac	cca	aac	aag	gat	cct	cta	aag	ctt	ggg	tac	act	ttt	gag	agc	3990
251	Arg	Asn	Pro	Asn	Lys	Asp	Pro	Leu	Lys	Leu	Gly	Tyr	Thr	Phe	Glu	Ser	
252				190						195					200		
254	atc	gcg	cag	cta	ctt	gac	atc	aca	cta	ccg	gta	ggc	cca	ccc	ggg	gag	4038
255	Ile	Ala	Gln	Leu	Leu	Asp	Ile	Thr	Leu	Pro	Val	Gly	Pro	Pro	Gly	Glu	
256				205						210					215		
258	gat	gac	aag	ccc	tgg	gtg	cca	ctc	aca	aga	gtg	ccg	tca	cgg	atg	ttg	4086
259	Asp	Asp	Lys	Pro	Trp	Val	Pro	Leu	Thr	Arg	Val	Pro	Ser	Arg	Met	Leu	
260				220						225					230		
262	gtg	ctg	acg	gga	gac	gta	gat	ggc	gac	ttt	gag	gtt	gaa	gat	tac	ctt	4134
263	Val	Leu	Thr	Gly	Asp	Val	Asp	Gly	Asp	Phe	Glu	Val	Glu	Asp	Tyr	Leu	
264				235						240					245		
266	ccc	aaa	atc	aac	ctc	aag	tca	tca	agt	gga	cta	cca	tat	gta	ggg	cgc	4182
267	Pro	Lys	Ile	Asn	Leu	Lys	Ser	Ser	Ser	Gly	Leu	Pro	Tyr	Val	Gly	Arg	
268	250					255					260					265	
270	acc	aaa	gga	gag	aca	att	ggc	gag	atg	ata	gct	ata	tca	aac	cag	ttt	4230
271	Thr	Lys	Gly	Glu	Thr	Ile	Gly	Glu	Met	Ile	Ala	Ile	Ser	Asn	Gln	Phe	
272						270					275				280		
274	ctc	aga	gag	cta	tca	aca	ctg	ttg	aag	caa	ggg	gca	ggg	aca	aag	ggg	4278
275	Leu	Arg	Glu	Leu	Ser	Thr	Leu	Leu	Lys	Gln	Gly	Ala	Gly	Thr	Lys	Gly	
276				285						290					295		
278	tca	aac	aag	aag	aag	cta	ctc	agc	atg	tta	agt	gac	tat	tgg	tac	tta	4326
279	Ser	Asn	Lys	Lys	Lys	Leu	Leu	Ser	Met	Leu	Ser	Asp	Tyr	Trp	Tyr	Leu	
280				300						305					310		
282	tca	tgc	ggg	ctt	ttg	ttt	cca	aag	gct	gaa	agg	tac	gac	aaa	agt	aca	4374
283	Ser	Cys	Gly	Leu	Leu	Phe	Pro	Lys	Ala	Glu	Arg	Tyr	Asp	Lys	Ser	Thr	
284				315						320					325		
286	tgg	ctc	acc	aag	acc	cgg	aac	ata	tgg	tca	gct	cca	tcc	cca	aca	cac	4422
287	Trp	Leu	Thr	Lys	Thr	Arg	Asn	Ile	Trp	Ser	Ala	Pro	Ser	Pro	Thr	His	
288	330					335					340					345	
290	ctc	atg	atc	tcc	atg	atc	acc	tgg	ccc	gtg	atg	tcc	aac	agc	cca	aat	4470
291	Leu	Met	Ile	Ser	Met	Ile	Thr	Trp	Pro	Val	Met	Ser	Asn	Ser	Pro	Asn	

## RAW SEQUENCE LISTING

DATE: 10/14/2005

PATENT APPLICATION: US/10/551,877

TIME: 13:43:31

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\10142005\J551877.raw

292		350		355		360	
294	aac	gtg	ttg	aac	att	gaa	ggg
295	Asn	Val	Leu	Asn	Ile	Glu	Gly
296				365		370	
298	ttc	aga	gga	ggg	ttg	aac	agg
299	Phe	Arg	Gly	Gly	Leu	Asn	Arg
300				380		385	
302	gaa	ccc	aag	gct	ctt	gta	tat
303	Glu	Pro	Lys	Ala	Leu	Val	Tyr
304				395		400	
306	aac	acg	tgg	tac	tca	att	gac
307	Asn	Thr	Trp	Tyr	Ser	Ile	Asp
308	410					415	
310	cgc	caa	cac	atg	caa	gcc	gca
311	Arg	Gln	His	Met	Gln	Ala	Ala
312				430		435	
314	tca	gac	aac	ggc	gac	cca	atg
315	Ser	Asp	Asn	Gly	Asp	Pro	Met
316				445		450	
318	atg	aac	att	gcc	cct	gct	cta
319	Met	Asn	Ile	Ala	Pro	Ala	Leu
320				460		465	
322	aac	ctg	caa	att	aag	acc	tat
323	Asn	Leu	Gln	Ile	Lys	Thr	Tyr
324				475		480	
326	ttc	atc	aac	aac	cac	ctc	ttg
327	Phe	Ile	Asn	Asn	His	Leu	Leu
328	490					495	
330	ttg	atg	aga	cag	ccc	aga	cca
331	Leu	Met	Arg	Gln	Pro	Arg	Pro
332				510		515	
334	gac	aag	cta	ggt	atc	aac	ttt
335	Asp	Lys	Leu	Gly	Ile	Asn	Phe
336				525		530	
338	agg	ggc	aag	ctg	aga	cag	ctt
339	Arg	Gly	Lys	Leu	Arg	Gln	Leu
340				540		545	
342	agt	ggg	ggg	gtt	gaa	cca	gaa
343	Ser	Gly	Gly	Val	Glu	Pro	Glu
344				555		560	
346	cta	cta	ggg	tgg	tca	gct	aca
347	Leu	Leu	Gly	Trp	Ser	Ala	Thr
348	570					575	
350	ccg	gtg	ctt	gac	aag	gaa	cgc
351	Pro	Val	Leu	Asp	Lys	Glu	Arg
352				590		595	
354	gga	gta	gag	aac	aag	agt	ctc
355	Gly	Val	Glu	Asn	Lys	Ser	Leu
356				605		610	

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/551,877

DATE: 10/14/2005

TIME: 13:43:32

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\10142005\J551877.raw

L:17 M:270 C: Current Application Number differs, Replaced Current Application Number